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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,297	07/26/2006	Tsutomu Nakamura	Q95748	6533

23373 7590 06/18/2008
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EXAMINER

FISCHER, JUSTIN R

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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06/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,297	Applicant(s) NAKAMURA, TSUTOMU	
	Examiner Justin R. Fischer	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) 6-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>040708</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa (JP 2002-19413). Nakagawa is directed to a radial tire construction for a two-wheeled vehicle (e.g. motorcycle), wherein said tire comprises (a) a radial carcass 2 formed of cords having an inclination between 70 and 90 degrees with respect to the equatorial plane of the tire and (b) at least one layer of a steel spiral belt

3. While the reference fails to expressly disclose the in plane and out of plane rigidity (and the associated equilibrium value defined by the ratio), one of ordinary skill in the art at the time of the invention would have expected the tread portion of Nakagawa to satisfy the claimed ranges. In particular, the spiral belt of Nakagawa is formed of cords having a single strand structure $1 \times N$, wherein $N=2-7$ and the filaments (N) have a diameter between 0.15 mm and 0.35 mm. In this instance, each of the disclosed characteristics is substantially analogous to that of the claimed invention and thus, it appears that the tread portion of Nakagawa would have properties in accordance to the claimed invention. It is further noted that there does not appear to be any unique processing that results in the claimed properties- it appears that the claimed properties are a direct function of the structure and design of the spiral steel belt layer and given

Art Unit: 1791

the extreme similarities between the claimed structure and that of Nakagawa, one of ordinary skill in the art at the time of the invention would have found it obvious to form the tire of Nakagawa with the claimed rigidities.

Also, with respect to the independent claim, the example tires of Nakagawa have an aspect ratio of 0.55 (rear tire) and 0.70 (front tire) (Paragraph 46). One of ordinary skill in the art at the time of the invention would have found it obvious to form a tire with an aspect ratio between 0.50 and 0.85 and a tread portion having the claimed properties. It is additionally noted that the front tire of Nakagawa (120/70ZR17) is identical to that used by applicant and the rear tire of Nakagawa is extremely similar to that used by applicant (slight difference in aspect ratio) (Paragraph 46).

Lastly, with respect to the independent claim, Nakagawa teaches a **preferred** end count between 5 and 30 ends per 25 mm. It is emphasized that the aforementioned range is described as a preferred embodiment and a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments (MPEP 2123). As such, one of ordinary skill in the art at the time of the invention would have found it obvious to use additional cord densities, including those between 38 and 60 cords per 25 millimeters. It is additionally noted that applicant has not provided a conclusive showing of unexpected results for the claimed range.

With respect to claim 3, given the extreme similarities between the claimed tire and that of Nakagawa, one of ordinary skill in the art at the time of the invention would have expected the rigidity ratio to fall between 0.96 and 1.06 and/or between 0.98 and

1.08. It is emphasized that the rigidities appear to be directly related to the structure and design of the steel spiral belt layer.

As to claim 14, the claim is directed to a method of mounting a single tire on a motorcycle- any limitations regarding a relationship between a front and rear tire do not further define the claimed method of mounting "a pneumatic radial tire on a motorcycle".

Response to Arguments

3. Applicant's arguments filed May 28, 2008 have been fully considered but they are not persuasive.

As detailed above, the disclosed range between 5 and 30 cords per 25 millimeters represents a preferred embodiment and a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments (MPEP 2123). As to Tables 1 and 2, the examples do not provide a conclusive showing of unexpected results. In particular, the cord construction and the cord end count are varied between respective examples and thus, it is unclear if any realized benefits should be attributed to the parameters individually or in combination. For example, Example 1, which is within applicant's claimed range, and Example 2, which is outside of applicant's claimed range, differ in cord construction and cord end count- it is unclear if the realized benefits (slight difference in belt surface rigidity) are a result of the cord construction and/or cord end count. This is similarly the case in Table 2, where the cord construction and cord end count are varied between Examples 3 and 4. As such, Tables 1 and 2 do not provide a conclusive showing of unexpected results. Lastly, it is noted that the upper end of the

Art Unit: 1791

preferred range of 30 cords per 25 millimeters, which is closer to Examples 2 and 4 than Conventional Examples 1 and 2.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin Fischer
/Justin R Fischer/
Primary Examiner, Art Unit 1791